



Illinois Department of Natural Resources

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<http://dnr.state.il.us>

Pat Quinn, Governor
Marc Miller, Director

March 30, 2012

Ms. Laurie Olson
Village President
Village Hall
5600 Hunter Drive
Richmond, IL 60071

RE: **Richmond-Burton High School Field House Addition – Richmond
McHenry County
Endangered Species Consultation Program
Natural Heritage Database Review # 1205901**

Dear Ms. Olson:

This letter concerns the Endangered Species Consultation for this project located in Section 21, Township 46 North, Range 8 East submitted by Gewalt Hamilton & Associates, Inc., for consultation in accordance with the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], and Title 17 *Illinois Administrative Code* Part 1075.

The proposed action involves construction of a new 30,000 square foot building addition to the high school, a detention basin, utility work, sidewalk installation, site regrading, and site restoration. This project is in the vicinity of several protected resources, including the **Delta Kames Illinois Natural Area Inventory (INAI) Site, North Branch of Nippersink Creek INAI Site**, the State-listed endangered **Blanding's Turtle**, *Emydoidea blandingii*, **Upland Sandpiper**, *Bartramia longicauda*, **Black-Crowned Night Heron**, *Nycticorax nycticorax*, **Common Moorhen**, *Gallinula chloropus*, **Yellow-headed Blackbird**, *Xanthocephalus xanthocephalus*, and State-listed threatened **Least Bittern**, *Ixobrychus exilis*, records.

The Department has completed its review of the project and determined that the action may have an adverse impact on Blanding's Turtles that inhabit surrounding uplands and wetland complexes in the area. To minimize these impacts, the Department recommends that the following measures be implemented by the developer and incorporated in the Village's project authorization.

Blanding's Turtles

The Department is concerned with the effect that construction, and build out, could have on populations within the vicinity of the high school. Since the Department has records to the north, west and south of the high school, turtles could traverse the area as they travel between wetland and upland areas. Construction activities could cause turtles to become trapped within the confines of the property and/or be crushed by equipment or vehicles. Once construction is complete, fences, roads and curbs can act as barriers to the turtles if they come onto the grounds.

1. The Department recommends that construction crews, and all on-site personnel, be educated and informed about Blanding's Turtles before work begins. Photos of both adult and juvenile Blanding's turtles should be distributed and the site management plan for responding to potential encounters should be discussed in a training session and at a preconstruction site meeting.

2. Mowing regimes for a site such as this present an added risk of injury or death to turtles as they travel to and from wetlands during spring, summer, and fall. Anyone that will be mowing should also be educated about the species, be aware that they may be present between March – October, and be instructed on what to do if any Blanding's Turtles are encountered.

3. If a turtle is encountered on site, personnel should be instructed to immediately stop construction in the surrounding area and contact the McHenry Country Conservation District (815/678-4532) and the Department's Heritage Biologist (Brad Semel, 815/675-2386 x 317) *keeping in mind it is a criminal act to handle a listed species*. Personnel on site should watch the turtle until the proper authority arrives to alleviate the situation, keeping at a respectable distance. If the turtle moves, crews should mark the spot they first saw the turtle and the last spot it was seen.

If a Blanding's Turtle is encountered, Incidental Take Authorization from the Department's Office of Resource Conservation will most likely be recommended, which would result in a Conservation Management Plan for the species for this project.

4. The project area may contain the route to a nesting site. Therefore, potential harm to transiting turtles is a concern. The Department recommends limiting construction to between October 31 and mid March, when this species is hibernating, to prevent construction activities from crushing or injuring juvenile or adult turtles.

5. If construction cannot be limited to the recommended time frame, exclusionary fencing should be installed and in place, from the beginning of March and remain until the end of October, to prevent turtles from entering the construction areas. Daily inspections of both sides of the fence should occur for the first two weeks and then be maintained weekly throughout the construction period to ensure the exclusionary fencing has been properly installed (dug into the ground) and to check if any turtles are present on either side of the fence.

6. The Department recommends that any trenches or excavations dug as a result of this project be covered at the end of each work day. Before starting each work day, trenches and excavations should be routinely inspected to ensure no turtles (or other animals) have become trapped within them.

7. The Department recommends basking logs and berms be placed within a naturalized, wet detention basin to accommodate turtles in their need to bask since they may be attracted to the basin.

Lighting Recommendations

Commercial and campus lighting tend to have a greater impact on natural resources from its fugitive light because the lights are usually larger, brighter, placed on higher standards, and may be left on during all hours of darkness. This can draw night-flying insects in and away from their normal locations (i.e., Delta Kames INAI Site), impacting the food availability of nocturnal predators and degrading ecological conditions at the natural area. Fugitive light can also occur in the daytime from sunlight reflecting off glass, metal or other surfaces; the resulting glare can illuminate areas which normally are not, and can alarm wildlife if the glare is not stationary. Lightwave frequency has a major influence on whether insects are attracted to light sources; manufacturers should have

data available on which type of lights minimize insect attraction. Low-pressure sodium-halide in the yellow/orange/pink spectrum is believed to have lower impacts.

The Department prefers a standard of no more than one horizontal foot-candle (lumen) at the natural area boundary for lateral lighting. The design of lamp fixtures has a major influence on this characteristic. While the Department is cognizant of the need to provide sufficient lighting to promote human safety and security, it is possible to do so using greater numbers of lights of lesser intensity at a lower elevation than fewer lights of higher intensity at a higher elevation.

The Department recommends that all forms of lighting for this project produce minimal lateral illumination by being directed downward vs. outward, and incorporate wave frequencies within the red-orange spectra (as opposed to blue-green spectra) so that insect attraction is minimized.

Consultation on the part of the Department is terminated. In accordance with 17 Ill. Adm. Code 1075.40(h), the Village must notify the Department of its decision regarding these recommendations, whether they will:

- Allow the action to proceed as originally proposed;
- Require the action to be modified per Department recommendations (please specify which measures if not all will be required); or
- Forgo the action.

This consultation is valid for two years unless new information becomes available that was not previously considered the proposed action is modified; or additional species, essential habitat, or Natural Areas are identified in the vicinity. IF the project has not been implemented within two years of the date of this letter, or any of the above listed conditions develop, a new consultation is necessary.

The natural resource review reflects the information existing in the Illinois Natural Heritage Database at the time of the project submittal, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, you must comply with the applicable statutes and regulations. Also, note that termination does not imply IDNR's authorization or endorsement of the proposed action.

Please contact me if you have questions regarding this review.

Sincerely,



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